

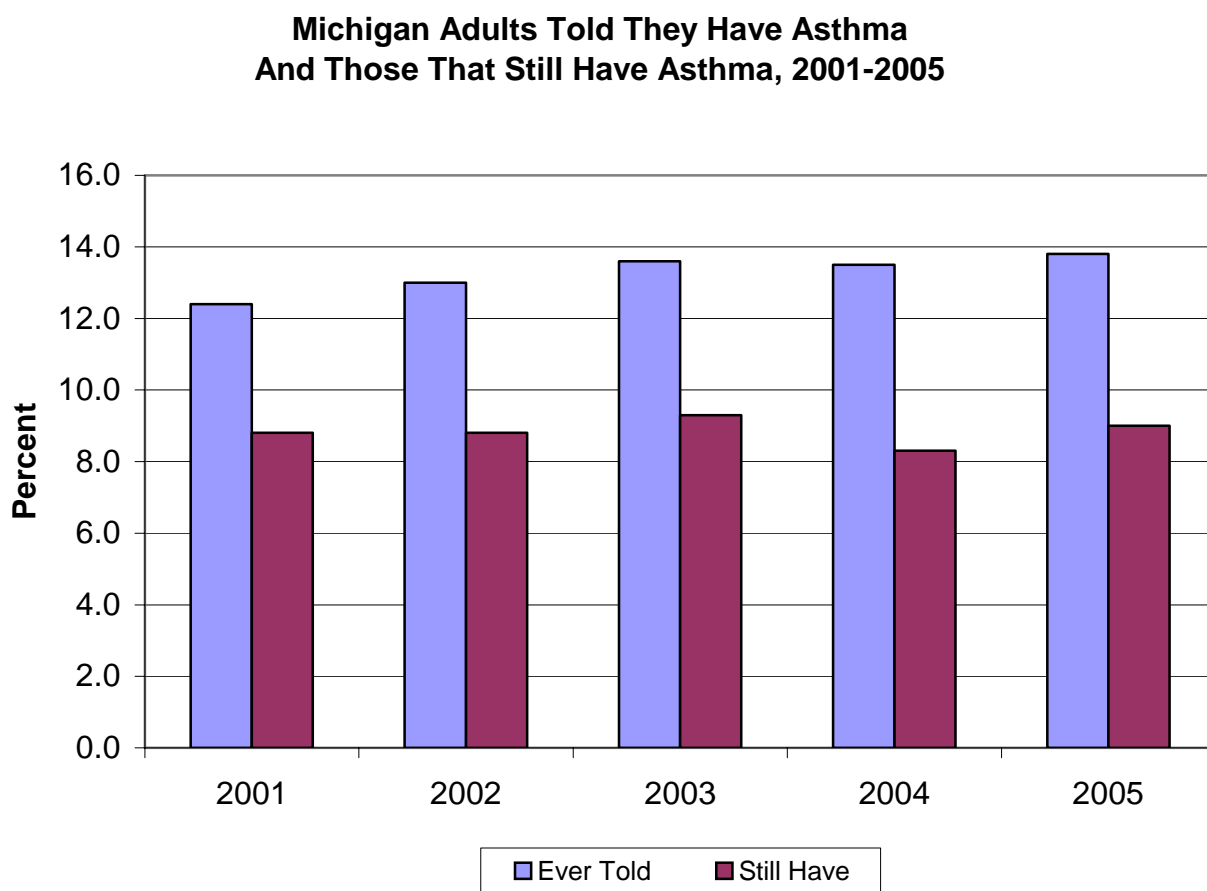


Topic: Chronic Lower Respiratory Disease

22. Asthma and Preventable Asthma Hospitalizations

Asthma is a chronic respiratory disease characterized by episodes or attacks of inflammation and narrowing of small airways which result in shortness of breath, wheeze, cough, and/or chest tightness in response to asthma triggers. Asthma attacks can vary from mild to life-threatening and involve shortness of breath, cough, wheezing, chest pain or tightness, or a combination. Many factors can trigger an asthma attack, including allergens, infections, exercise, abrupt changes in the weather, or exposure to airway irritants, such as tobacco smoke.

How are we doing?



The estimated proportion of Michigan adults ever told by a health care professional that they had asthma was 13.8% in 2005. Women were more likely than men to have ever been told this (15.8% vs. 11.6%). Among those who had ever been told that they had asthma, 65.2% were estimated to still have asthma. The most recent Michigan data indicate that 213,600 children and 654,100 adults currently have asthma. The percentage of adults who currently have asthma in Michigan has stayed the same between 2001 and 2005.

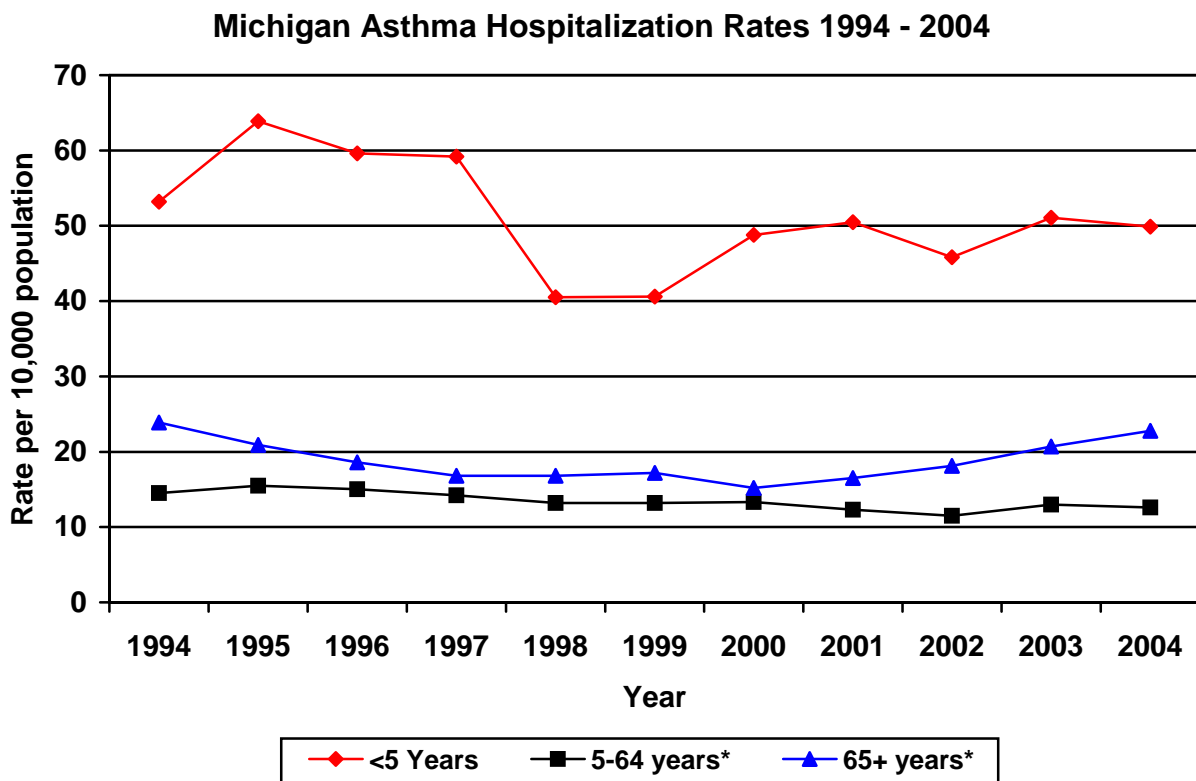


Critical Health Indicators

Asthma is the fourth leading cause of Ambulatory Care Sensitive (ACS) hospitalizations in Michigan, causing 6.4% of all these hospitalizations in the year 2004. ACS conditions refer to those conditions for which hospitalizations could have been avoided, or conditions that could have been less serious, if they had been treated early and appropriately.

Approximately 863,000 people in Michigan have asthma. Although there is no cure, asthma can be controlled using long-term control medications and rescue medications, regular assessment of lung function, and avoidance of exposures that make asthma worse. Hospitalizations due to asthma are preventable with good disease management but it is clear that, at least among adults, these techniques are not being practiced according to national guidelines. Over one-half of adults with asthma have had an asthma attack in the past 12 months. Only 46% report that they use a daily medication to control their asthma and 41% of them did not see their health care professional for a routine check of their asthma in the last year.

In 2004, there were 16,410 hospitalizations due to asthma in Michigan, costing an estimated 115 million dollars in hospital charges alone. Hospitalization rates in young children and older adults dropped significantly during the 1990s but did not change between 1999 and 2004.



How does Michigan compare with the U.S.?

Asthma is the leading chronic illness of children in the United States. The prevalence of asthma in Michigan adults is very similar to that for the nation as a whole, and decreases with increasing income among adults.

Asthma hospitalization rates for children and adults in the Michigan are significantly lower than those for the nation as a whole. Rates among White residents of Michigan are lower than the rate for the United States; however, rates for Black residents of Michigan are significantly higher than for the United States.



Asthma Hospitalization Rates per 10,000 (age-adjusted)
By Age Group and Race, Michigan and the United States, 2002

Age Group	United States	Michigan
Children <18 years	27	21.3 (20.7, 21.8)
Adults 18+ Years	13	12.5 (12.2, 12.7)
All Ages	17	14.7 (14.5, 15.0)
Whites	11	9.9 (9.7, 10.1)
Blacks	36	42.0 (41.0, 43.1)

How are different populations affected?

A higher proportion of adult women (11.3%) than men (6.5%) reported they currently had asthma in Michigan during 2005. The proportion of Michigan adults with asthma was higher in low-income households and among adults with less than a college degree. The proportion of Black and Hispanic adults with asthma appears higher than the proportion of White adults, but this difference is not statistically significant.

Asthma is the number one cause of Ambulatory Care Sensitive hospitalizations among children (younger than 18 years) in Michigan, causing 23.2% of all ACS hospitalizations in this age group during 2004. Asthma hospitalization rates are highest in younger children (0-4 years of age); however, the largest numbers of hospitalizations occur in adults. During childhood, rates are higher among males than females. After age 15 rates among females are higher than rates for males.

Asthma hospitalization rates in Michigan are three to five times higher in Blacks than in Whites, depending on age group, in 2004. Asthma hospitalization rates for people living in poor areas were four times higher than those for people living in highest income areas (top 20% of median household income) (2000-2002 data). The racial disparity in hospitalization rates persists across all income groups, with Black residents of high-income ZIP codes having rates 3.8 times higher than White residents of high-income ZIP codes.

Genesee, Wayne and Saginaw counties have asthma hospitalization rates that are higher than the rate for the state for both children and adults.

What is the Department of Community Health doing to improve this indicator?

In 2000, the Michigan Department of Community Health convened 125 asthma experts with knowledge in clinical care, education, environmental quality and surveillance to develop a strategic plan for asthma. This resulted in the Asthma Initiative of Michigan (AIM). AIM includes the Michigan Asthma Communication Network, which created a website with the help of experts in statistics and epidemiology, the environment, patient care, and provider education. AIM also includes eleven local asthma coalitions which provide education and outreach to people with asthma, health care providers, schools and workplaces across Michigan. A state-level advisory committee guides and monitors the strategic plan implementation. For further information, please visit: <http://www.getastmahelp.org/> or call the toll-free information line 1-866-EZLUNGS.

With federal and state funding, the MDCH Asthma Control Program is identifying and eliminating asthma disparities, assessing asthma burden and response, supporting partnerships to address asthma, improving systems of care, reducing barriers to self-management in people with asthma, and reducing exposures to environmental factors that cause and/or exacerbate asthma.



Critical Health Indicators

There are also projects that focus on schools and the importance of the relationships between environmental triggers and asthma. Standardized emergency department discharge instructions are being promoted to emergency departments to encourage patients with asthma to access care according to national guidelines. The MDCH is also reviewing all asthma deaths in children and young adults to identify ways to prevent these deaths in the future.

Michigan is currently one of six states selected by the Agency for Health Care Quality to participate in the Learning Partnership to Decrease Disparities in Pediatric Asthma. This includes an action plan to address Michigan's disparities in pediatric asthma.

For more information about asthma, go to www.GetAsthmaHelp.org.